In the specification:

Please replace the paragraph beginning at page 4, line 7 with the following amended paragraph:

Figure 3 shows an enlarged partial cross section of the single rotary mechanical seal shown in Figure ~~3~~ 2;

Please replace the paragraph beginning at page 4, line 9 with the following amended paragraph:

Figure 4 shows an enlarged view of the stationary seal face strain measurement device of the seal of Figure ~~2~~ 3;

Please replace the paragraph beginning at page 6, line 5 with the following amended paragraph:

From Figure 4, the strain device 23 is permanently attached to the anti-rotation pin 22, preferably by adhesive. However it is understood that any other suitable means could be used, including mechanical attachment, chemical attachment and/or physical attachment such as welding or brazing etc.

Please replace the paragraph beginning at page 6, line 11 with the following amended paragraph:

Referring back to Figure 3, any force, torque or vibration, transmitted from the sealing area 13 to the stationary seal face 12 and then to the anti-rotation pin 22, is monitored as a resistance change in the strain device 23. From Figure 4, the strain device 23 is connected to an amplifier 27 which in turn is connected to a micro-controller 28, volatile memory 29 and RF transmitter 30. The resistance change from the strain device 23 is amplified by the amplifier 27 and a signal sent to the micro-controller 28. The micro-controller 28 ~~poles~~ polls the data by checking or comparing the signal information to a benchmark reading and then date and time stamps it. The time-logged information is then saved in volatile memory 29. Two-way

communicating RF transmitter 30 is employed so data can be saved and retrieved. RF transmitter 30 could be any wireless device. Clearly, the transmission of data could also be by means of hard wired technology.

Please replace the paragraph beginning at page 7, line 7 with the following amended paragraph:

The strain device 200 is permanently attached to the plate 202, preferably by adhesive. However it is understood that any other suitable means could be used, including mechanical attachment, chemical attachment and/or physical attachment such as welding or brazing.

Please replace the paragraph beginning at page 7, line 26 with the following amended paragraph:

The displacement transducer 33 is connected to an amplifier which in turn is connected to a micro-controller 35, memory 36 and RF transmitter 37. The axial displacement change from the transducer 33 is amplified by the amplifier 34 and a signal sent to the micro- controller 35. The micro-controller 35 ~~poles~~ polls the data by checking or comparing the signal information to a benchmark reading and then date and time stamps it.

Please replace the paragraph beginning at page 9, line 11 with the following amended paragraph:

The resistance change from the strain gauge 45 is amplified by the amplifier 50 and a signal sent to the micro-controller 51. The micro-controller 51 ~~poles~~ polls the data by checking or comparing the signal information to a benchmark reading and then date and time stamps it.

Please replace the paragraph beginning at page 13, line 10 with the following amended paragraph:

For the purpose of this application, wireless technology includes, but is not limited to Internet, Satellite, WAP (wireless application protocol) phones, LAN (local area network),

WLAN (wireless local area network), field bus connector, WEP (wireless encryption protocol) and ~~bluetooth~~ Bluetooth. Clearly hard wire technology can also be employed. The technology also allows the health monitor software to dial and send a message to a mobile cell phone, if required.

Please replace the paragraph beginning at page 13, line 16 with the following amended paragraph:

Figure 12 illustrates a schematic of a remote receiver unit of the invention. The remote receiver 110 is employed by the user to review the health status on a particular rotating equipment application as the user attends site. The receiver 110 comprises a series of components situated inside a casing 111.

Please replace the paragraph beginning at page 13, line 21 with the following amended paragraph:

The RF receiver 112 is connected to a RF aerial/external ~~antennae~~ antenna 113. The RF receiver 112 receives the sensor data from the application, which is stored in memory previously described. The RF receiver 112 sends the data to a micro-controller 114. The micro-controller 114 sends the information to a VFD display 115 which is connected to a suitable power supply, in this case a battery 116. The display 115 is also connected to an earth terminal 117.

Please replace the paragraph beginning at page 13, line 27 with the following amended paragraph:

The micro-controller 114 is preferably connected to one or more user control switches 118. Switches 118 are connected to user control buttons 119 ~~also~~ illustrated in Figure 13A. Switches 118 are also connected to an earth terminal ~~119~~ 117.

Please replace the paragraph beginning at page 14, line 16 with the following amended paragraph:

Figures 13A and B illustrate a remote receiver unit 110. The outer casing 111 covers the components and electrical circuit described above with reference to Figure 12. In addition, a graphic illustration of the display 115, LED display 124, D-Type RS232 connector 123 , RFID ~~antennae~~ antenna 113 and user buttons 119 may be seen.

Please replace the paragraph beginning at page 14, line 29 with the following amended paragraph:

When the power switch 131 is activated, the transistor 133 preferably sources power supply from the solar cell 134. In applications where there is insufficient power generated by the solar cell 134, the transistor 133 sources power supply from the battery 135, until such a time when the minimum power level is achieved by the solar cell 134. The transistor 133 then switches the power source to the solar cell 134 thereby ~~elongating~~ prolonging the finite battery 135 life.

Please replace the paragraph beginning at page 14, line 29 with the following amended paragraph:

When the power switch 131 is activated, the transistor 133 preferably sources power supply from the solar cell 134. In applications where there is insufficient power generated by the solar cell 134, the transistor 133 sources power supply from the battery 135, until such a time when the minimum power level is achieved by the solar cell 134. The transistor 133 then switches the power source to the solar cell 134 thereby ~~elongating~~ prolonging the finite battery 135 life.

Please replace the paragraph beginning at page 15, line 7 with the following amended paragraph:

The unit shown in Figure 14 includes a large number of LED displays 136. Figure 14 shows that

these can be positioned either side of the display 140 allowing the user to visually display the ~~sensored~~ logged detail with respect to the control limits 142 on the displayed screen.

Please replace the paragraph beginning at page 15, line 10 with the following amended paragraph:

Referring to Figures 15A and B the unit has an outer casing 143 which houses the components and electrical circuit. The unit also includes a graphic illustration of the display 140, LED display 136 , D-Type RS232 connector 144, RF ~~antennae~~ antenna 145, keypad 146 and AC power connector 147. The keypad 146 may provide both alpha and numerical options which would allow the user to program the remote device 148, independent of a separate computer.

Please replace the paragraph beginning at page 16, line 10 with the following amended paragraph:

The design of the invention can be adapted for intrinsically safe applications also. By way of example only, to achieve this the electronics ~~is~~ are designed to run below a certain power/amp level. Alternatively the electronics could be sealed in a media which insulates them. Such a media is, for instance, bitumen.

Please replace the paragraph beginning at page 16, line 17 with the following amended paragraph:

The invention, including one or more ~~sensoring~~ sensor devices, may be applied to any type of mechanical seal assembly whether designed as a stationary, rotary, double, single or triple seal, component or cartridge with hydraulically balanced or unbalanced seal faces.